



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4628

June 3, 2010

Donald C. Supcoe
Senior Vice President, Secretary and General Counsel
Energy Corporation of America
4643 South Ulster Street
Suite 1100
Denver, Colorado 80237

**Re: Energy Corporation of America
Amendment No. 1 to Registration Statement on Form S-1
Filed May 7, 2010
File No. 333-165833**

Dear Mr. Supcoe:

We have reviewed your amended filing and your response letter dated May 7, 2010 and we have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Engineering comments, if any, will be provided in a separate letter.

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Amendment No. 1 to Form S-1

Summary

ECA Marcellus Trust I, page 1

1. We note your response to prior comment eleven and reissue this comment in part. Please include the information provided at page 79 of the prospectus in the summary.

Structure of the trust, page 8

2. We note your response to comment 16 and footnote 1, which indicates that the private investors will own 6.1% of the common units. The cover page and your disclosure on page 122 indicate that the private investors will own 6.1% of the trust units. Please advise. In the chart, please also clarify whether the percentages (25%, 25% and 50%) represent percentage ownership of the trust, or percentage ownership of the common units.

Use of proceeds, page 40

3. We note your response to our prior comment 19. We further note your statement that the note held by ECA is non-recourse to the trust. Please explain the meaning of the term non-recourse in this context, e.g., how it affects whether the trust will owe any additional amounts to ECA's subsidiary if you receive a lower initial public offering price for the units. In addition, clarify if the trust will owe any additional amounts to ECA's subsidiary in the event of a lower offering price, which must be paid by another means.
4. We note your response to prior comment 20 and reissue this comment. Once you know the expected size of the offering, and no later than when you provide the price range for the offering, you will need to provide the estimated amounts you intend to allocate to each of the identified uses by ECA. Instead, provide necessary detail for each intended use, and present the information in tabular form to facilitate clarity. Refer generally to Item 504 of Regulation S-K. Disclose the specific amounts ECA will use to purchase units from the private investors, to reduce borrowings under its revolving credit facility, and for general corporate purposes.

Target Distributions and Subordination and Incentive Thresholds, page 56

5. We note your response to prior comment 15. Please include the information provided as Exhibit A to your response letter in this section of the filing.

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Financial Statements – General

6. We understand that you will be updating your financial statements to comply with Rule 3-12 of Regulation S-X.

Unaudited Pro Forma Financial Information – ECA Marcellus Trust I, page F-12

Note 5 – Supplemental Information on Gas Producing Properties, page F-18

7. Please expand your tables showing pro forma gas reserves and standardized measures of discounted future net cash flows, as presented on pages F-18 to F-20, to include and reconcile to the corresponding amounts shown on pages F-5 to F-7, for the Underlying Properties, with an explanation of the adjustments.

Summary Reserve Reports, Annex A

8. We note your response to prior comment 38, regarding language limiting use of the Ryder Scott report. Please be advised that we are continuing to consider the correspondence received from Ryder Scott and may have further comment.

Closing Comments

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

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We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Lily Dang at (202) 551-3867 or Karl Hiller, Branch Chief at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters. Please contact Sean Donahue at (202) 551-3579 or me at (202) 551-3611 with any other questions.

Sincerely,

Anne Nguyen Parker
Branch Chief

cc: S. Donahue
L. Dang
K. Hiller
R. Winfrey
D. Oelman (713.615.5861)